

**ABSTRACT**

The present invention provides a connector arrangement operative to connect a prime mover driven alternator to an alternating current circuit with an existing alternating current. For example, the connector arrangement may be used to connect an alternator driven by a Stirling engine to an alternating current mains electricity supply. The connector arrangement includes a circuit with an adjustable resonant frequency, adjustable between a first resonant frequency tuned to an initial operating frequency of the prime mover and a second resonant frequency detuned to the initial operating frequency. This adjustable resonant frequency is beneficial as it allows operation to be tailored to the exact operating conditions of the prime mover that is likely to have its own resonant frequency that may vary according to its operating condition.